



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/750,355	12/29/2003	Gaetan L. Mathieu	P80C1-US	3896
50905	7590	09/20/2007	EXAMINER	
N. KENNETH BURRASTON			LEON, EDWIN A	
KIRTON & MCCONKIE			ART UNIT	
P.O. BOX 45120			PAPER NUMBER	
SALT LAKE CITY, UT 84145-0120			2833	
NOTIFICATION DATE		DELIVERY MODE		
09/20/2007		ELECTRONIC		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

nkbpto@kmclaw.com
kburraston@kmclaw.com
ecowles@kmclaw.com

Office Action Summary	Application No.	Applicant(s)	
	10/750,355	MATHIEU ET AL.	
	Examiner	Art Unit	
	Edwin A. León	2833	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) Responsive to communication(s) filed on 02 July 2007.

2a) This action is **FINAL**. 2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) Claim(s) 102-137 is/are pending in the application.
4a) Of the above claim(s) 13 and 135 is/are withdrawn from consideration.

5) Claim(s) 107-134 and 137 is/are allowed.

6) Claim(s) 102, 104-106 and 136 is/are rejected.

7) Claim(s) _____ is/are objected to.

8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) All b) Some * c) None of:
1. Certified copies of the priority documents have been received.
2. Certified copies of the priority documents have been received in Application No. _____.
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) Notice of References Cited (PTO-892)
2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) Information Disclosure Statement(s) (PTO/SB/08)
 Paper No(s)/Mail Date _____

4) Interview Summary (PTO-413)
 Paper No(s)/Mail Date. _____
5) Notice of Informal Patent Application
6) Other: _____

DETAILED ACTION

Response to Amendment

1. Applicant's amendment filed July 2, 2007 in which Claims 102, 107-108 and 129 have been amended and Claim 85 has been cancelled, has been placed of record in the file.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which the subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.
3. Claims 102, 104-106 and 136 are rejected under 35 U.S.C. 103(a) as being unpatentable over Matsuoka (U.S. Patent No. 5,286,208) in view of Distefano et al. (U.S. Patent No. 6,007,349). With regard to Claim 102, Matsuoka discloses (in Attachment 1) an electronic interconnect element comprising: a first leaf portion (in Attachment 1); a contact tip (in Attachment 1) located on a first side (in Attachment 1) of the first leaf portion and disposed to electrically engage a contact feature (18) of an electronic device (Column 3, Lines 61-62); at least one first support (in Attachment 1) offset from the contact tip and coupled directly to a second side (in Attachment 1) of the

first leaf portion opposite the first side of the first leaf portion offset from; a second leaf portion (in Attachment 1) having a first side (in Attachment 1) coupled directly to the at least one first support, wherein the at least one first support joins the first leaf portion directly to the second leaf portion such that the first side of the first leaf portion, the second side of the first leaf portion, the first side of the second leaf portion, and a second side of the second leaf portion opposite the first side of the second leaf portion are substantially parallel; and at least one second support coupled directly to the second side of the second leaf portion.

Matsuoka discloses substantially the claimed invention except for the first leaf portion comprising a structural material deposited on a conductive seed material.

Distefano teaches (in Fig. 3A) a similar connector using a structural material (60) deposited on a conductive seed material (Column 6, Lines 12-16).

Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the element of Matsuoka by having a structural material deposited on a conductive seed material, as taught in Distefano in order to meet environmental and design requirements and since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as matter of obvious design choice. *In re Leshin*, 125 USPQ 416.

With regard to Claims 104-105, Matsuoka and Distefano discloses substantially the claimed invention except for a third support point spaced apart from the first support and coupled to the opposite side of the first leaf portion offset from the contact tip, and a fourth support spaced apart from the second support and coupled to the opposite side

of the second leaf portion offset from the first contact, a third leaf portion having a first side coupled to the second support, and a third support coupled to an opposite side of the third leaf portion offset from the second support.

Still, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have a third support point spaced apart from the first support and coupled to the opposite side of the first leaf portion offset from the contact tip, and a fourth support spaced apart from the second support and coupled to the opposite side of the second leaf portion offset from the first contact, a third leaf portion having a first side coupled to the second support, and a third support coupled to an opposite side of the third leaf portion offset from the second support, since it has been held that mere duplication of the essential working parts of a device involves only routine skill in the art.

St. Regis Paper Co. v. Bemis Co., 193 USPQ 8.

With regard to Claim 106, Matsuoka and Distefano discloses substantially the claimed invention except for the contact tip, the first and second leaf portions and the first and second supports being each structurally distinct and separate elements and each of the leaf structures, each of the at least one support structures, the post structure, and the contact tip structure being distinct and separate structures.

Still, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have the contact tip, the first and second leaf portions and the first and second supports being each structurally distinct and separate elements and each of the leaf structures, each of the at least one support structures, the post structure, and the contact tip structure being distinct and separate structures, since it

has been held that constructing a formerly integral structure in various elements involves only routine skill in the art. *Nerwin v. Erichman*, 168 USPQ 177, 179.

With regard to Claim 136, Matsuoka discloses (in Attachment 1) an axis substantially perpendicular to the first side of the first leaf portion and passing through the contact tip is offset along a length of the first side of the first leaf portion from an axis substantially perpendicular to the first side of the first leaf portion and passing through the at least one first support.

Allowable Subject Matter

4. Claims 107-134 and 137 are allowed.

The references fail to teach, disclose, or suggest, either alone or in combination, regarding Claim 107, the underside of the one leaf portion immediately below the contact tip defining an open space into which the first side can deflect when the contact tip is depressed; regarding Claim 108, at least two of the plurality of support structures being offset from the contact tip; regarding Claim 129, the attachment structure extending an effective distance directly from a second end of the beam structure opposite the first end and extending in a second direction that is different than the first direction, substantially all of the attachment structure located at the second end, the attachment structure configured to attach the interconnect element to an electronic component such that, while attached to the electronic component, the beam structure is

disposed approximately the effective distance from the electronic component and in combination with the rest of the limitations of the base claims.

Response to Arguments

5. Applicant's arguments with respect to claims 102, 104-134 and 136-137 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Edwin A. León whose telephone number is (571) 272-2008. The examiner can normally be reached on Monday - Friday 10:00-6:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paula A. Bradley can be reached on 571-272-2800, extension 33. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should

you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Edwin A. Leon/
AU 2833